



# MLDS CENTER

Maryland Longitudinal Data System

Address 550 West Baltimore Street  
Baltimore, MD 21201  
Phone 410-706-2085  
Email [mlds.center@maryland.gov](mailto:mlds.center@maryland.gov)  
Website [www.MLDSCenter.org](http://www.MLDSCenter.org)

## MEMORANDUM

**TO:** MLDS Governing Board

**FROM:** Angela Henneberger, Research Branch Director and Assistant Research Professor,  
University of Maryland School of Social Work

**DATE:** December 2, 2022

**SUBJECT:** External Researcher and Grant Funded Projects

---

### Purpose

The purpose of this agenda item is to:

1. Provide an update on two external research projects that were presented to the Research and Policy Advisory Board and recommended to the Executive Director via the expedited review process; and
2. Seek approval for a third external research project that was favorably reviewed by the Research and Policy Advisory Board.

### Proposal 1: Project NEXUS: Nurturing EXcellence for Undergraduate Success

Dr. Nancy Shapiro, Associate Vice Chancellor for Education and Outreach, University System of Maryland and Dr. Jing Liu, Research Branch Member and Assistant Professor at UMCP, proposed a project funded by the Abell Foundation. The project as a whole comprises three main areas of investigation: (1) To what extent are undergraduate students from historically underrepresented groups who are enrolled at Maryland public 4-year institutions prepared for college? How well do they perform in college? (2) What support programs and services are available to historically underrepresented students at their institutions?; and (3) how do these students perceive and experience supports and challenges at their institutions? The first area is the subject of this application for access to and use of MLDS data. The second area is being addressed through a statewide inventory of university-based support programs. Finally, the third area is being addressed by qualitative analyses of interview data with current undergraduate students and student affairs staff. This project was recommended and approved through the expedited review process.

**Board Action:** Information Only.

### Proposal 2: Maryland State and Local Teacher Shortage: Sources and Solutions

The proposed study will use data from the Maryland Longitudinal Data System (MLDS) in descriptive analysis of changes in the teacher workforce in Maryland. Given the current teacher shortage, this historical study will examine trends from 2016-17 to 2021-22. This will include a descriptive analysis of teachers who entered and exited before, during, and after COVID school closures. This project is funded by the Abell Foundation.

Part One of the analysis will provide a statewide overview of the distribution of teachers across Maryland LEAs including:

1. The distribution of teachers prior to COVID, including raw numbers, levels of experience, demographic diversity, and Maryland undergraduate/graduate institutions and degrees earned.
2. Exit patterns prior to COVID
3. Differential exit patterns during COVID

Part Two of the analysis will provide a deeper dive into teacher retention and turnover in a single LEA, Baltimore City Public Schools (BCPS), to examine variation across schools and students taught including:

1. Which Maryland undergraduate/graduate schools are sending graduates to BCPS and how do teacher retention rates differ across institutions of higher ed?
2. Which teachers are exiting? – How do retention rates vary across schools, teacher demographics, and classroom teaching assignments (e.g. assignment to hard-to-staff classrooms or by composition of student subgroups within the school)?
3. Where are former teachers going? – Are former BCPS teachers employed in other LEAs, in administrative positions, or in other Maryland employment?

**Board Action:** Information Only.

**Proposal 3: Connecting High School Credits and Course Sequences to Postsecondary Outcomes: Grounding High School diploma requirements to empirical evidence**

This project is a proposal by the Everyone Graduates Center at Johns Hopkins University. The project is to design and conduct an analysis of the relationship between the course requirements for high school graduation and students' postsecondary outcomes, using the Maryland Longitudinal Data System (MLDS). The impetus for this project is to provide LEAs and the State with empirical information to enable them to make informed decisions about what courses and in what sequence their students should take in order to graduate prepared to succeed in two- and four-year degree programs. Leveraging the available data, the study will answer the following research questions:

- Which high school courses (and related outcomes in these courses – credits earned, grades, GPA) and which course sequences are most predictive of postsecondary success (enrollment, persistence, diploma, for 2 and 4-year programs)?
- To what extent are students, across key subgroups, accessing these courses and course sequences?

With available data, the study will include focused analyses of student groups who are underrepresented in degree completion, including low-income students, students of color, students with disabilities, and English learners. This research will help states and local education agencies (LEAs) revisit high school graduation requirements (and potentially postsecondary admission requirements) to improve student access to and success in college. This study is funded by the Joyce Foundation.

**Board Action:** Approval requested.